

OPERATIONAL CRITERIA FOR AN ENGINEERING & INDUSTRIAL SYSTEMS (E&IS) PROGRAM

Program Description

Engineering & Industrial Systems Education prepares individuals for gainful employment, and includes training for apprenticeship trades, technical, industrial, and service occupations. Engineering & Industrial Systems (E&IS) Education and training curriculum are derived from occupational analyses, and involve students in hands-on development of job skills and related complementary skills. An integral part of the curriculum related to leadership and responsibilities of citizenship is provided through active participation in SkillsUSA or other state recognized leadership organizations for engineering and industrial systems educational students. In addition, the curriculum includes mastery of complementary technology; related mathematics and science; technical communication skills; drawing, art and/or design; occupational safety and hygiene; labor and industrial relations and management; and other directly related and supplementary experiences. All programs are approved by the Division of Professional-Technical Education using the following criteria:

1. The instructor is certified under the current state E&IS Certification Standards as specified by the Division.
2. The program adopts current state approved competency-based curriculum for the program area.
3. A program Advisory Committee representative of business, labor, industry, minorities, and individuals in traditional occupations, provides input for the program.
4. Leadership development, generally provided through professional technical student organizations, is integral to the program (SkillsUSA is the recommended group).
5. A budget exists for the program, fiscal records are maintained in accordance with state policies and guidelines, and the instructor is involved with its development.
6. Non-discriminatory counseling, curriculum design, lab procedure, and placement services are followed.
7. Safe, clean classrooms and laboratories are provided, and enrollments meet capacity standards based on available training stations as mutually established and recorded with the Division.
8. A student follow-up is conducted by the instructor on all program completers during the third and fifth year following completion of the program.
9. Program completers are those students who have successfully completed seventy-five percent of the established competencies at an institution or school.

10. Total instructional hours for an approvable program must be between 540 and 720 clock hours. During the program sequence, advanced level courses must include at least one multi-period block of instruction for a period of one year. The large amount of instructional hours is required in order for students to master the complicated tasks involved.
11. Student-teacher load should approximate 20-25 students for entry level classes, and is limited to 15-18 students for advanced level classes. Facility constraints and safety considerations require fewer students in E&IS programs.
12. All E&IS programs should be certified by a nationally recognized process when available. All Idaho E&IS curricula are based on National Skills Standards.

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